## EXHIBIT 17

## UNITED STATES DISTRICT COURT FOR THE DISTRICT OF MASSACHUSETTS

ASSOCIATION OF AMERICAN UNIVERSITIES, et al.,

Plaintiffs,

v.

DEPARTMENT OF HEALTH & HUMAN SERVICES, et al.,

Defendants.

Case No.

## **DECLARATION OF IAN A. WAITZ**

I, Ian A. Waitz, hereby state under the penalty of perjury that the following statements are true and accurate to the best of my knowledge, and that I could testify to these matters if called to do so:

- 1. I am the Vice President for Research of Massachusetts Institute of Technology ("MIT" or the "Institute"), a position I have held since May 2024. The matters addressed herein are based on my personal knowledge or upon information I learned in the course of my duties at MIT, including from others involved in MIT's institutional research, technology transfer, and finance operations.
- 2. I have been a member of MIT's faculty since 1991. In addition to serving as Vice President for Research, I am currently the Jerome C. Hunsaker Professor of Aeronautics and Astronautics. I previously served MIT as the department head of Aeronautics and Astronautics, Dean of the School of Engineering, and Vice Chancellor for Undergraduate and Graduate Education.
- 3. In my role as Vice President for Research, I am MIT's senior research officer and have overall responsibility for research administration and policy at the Institute. I oversee MIT's Research Administration Services and Research Compliance units. I also oversee more than a dozen interdisciplinary research laboratories and centers at MIT, including the Koch Institute for Integrative

Cancer Research (the "Koch Institute") and the Center for Clinical and Translational Research. I report directly to the President of MIT.

- 4. Research conducted at MIT contributes to innovation in areas critical to economic competitiveness, national security, and the quality of life enjoyed by all Americans. Some of MIT's main areas of research focus include health, biotech, artificial intelligence, energy, advanced manufacturing, cybersecurity, and quantum computing. Each year on its campus, MIT conducts approximately \$800 million of research sponsored by government, industry, and foundations. Approximately \$480 million of this research is sponsored by the federal government. MIT spends roughly an additional \$800 million on research from its own resources, including its endowment. This internal investment in research by MIT benefits and complements much of the federally-funded sponsored research on campus, and also decreases the cost of this research to the federal government.
- 5. MIT's research translates into critical and novel inventions. For ten consecutive years, MIT has produced more patents than any other campus in the nation. In 2024, 323 utility patents were issued to MIT by the U.S. Patent and Trademark Office. MIT holds approximately 4,000 active U.S. patents. To date, MIT has employed or educated 104 Nobel Prize laureates.
- 6. MIT's research also translates into innovation that helps drive the U.S. economy. A 2015 study<sup>1</sup> identified more than 30,000 active companies founded by MIT alumni, employing 4.6 million people and generating annual global revenues of \$1.9 trillion. That study's authors noted that these figures were "roughly equivalent to the GDP of the world's 10th largest economy as of 2014."
- 7. In the case of the Koch Institute for Integrative Cancer Research alone, over 120 spinout companies — many headquartered in the local Kendall Square area of Cambridge, Massachusetts

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<sup>&</sup>quot;Entrepreneurship and Innovation at MIT: Continuing Global Growth and Impact," MIT (Dec. 2015), https://entrepreneurship.mit.edu/wp-content/uploads/MIT-Entrepreneurship-Innovation-Impact-Report-2015.pdf.

- have their roots in the Koch Institute's cancer research, with nearly half having advanced their technologies to clinical trials or commercial applications.
- 8. Each year, MIT negotiates Facilities and Administrative ("F&A") cost reimbursement rates with the Office of Naval Research ("ONR"), its cognizant federal agency for such purpose. The provisional F&A rate for MIT's Fiscal Year 2025 (July 1, 2024 June 30, 2025), as negotiated with ONR in accordance with and under the authority set forth in 2 CFR Part 200, is 59.0%.<sup>2</sup>
- 9. MIT received \$156 million from the National Institutes of Health ("NIH") in Fiscal Year 2024 (July 1, 2023 June 30, 2024) for performing sponsored research.
- 10. MIT conducts research under 406 direct and indirect funding awards from NIH that are currently active for Fiscal Year 2025. This includes 328 grants, 7 contracts, 38 cooperative agreements, 23 fellowships, 5 NIH training grants, and 5 other transaction agreements. These awards involve 193 unique PIs at MIT. If NIH were to reduce the F&A rate on its grants and cooperative agreements to 15.0%, then MIT forecasts it will lose approximately \$35 million in reimbursement for costs that support NIH research over the next 12 months alone, assuming that MIT performs a similar level of research activity on NIH grants and cooperative agreements as it did in Fiscal Year 2024. The forecast for NIH-funded grants only, separate from cooperative agreements, is approximately \$31 million. If all federal agencies were to cap F&A reimbursements at 15.0% (for grants, cooperative agreements and contracts), MIT forecasts it will lose approximately \$113 million over the next 12 months in reimbursements for costs that support that research enterprise.
- 11. MIT forecasts direct sponsored research activity in its annual operating budget, and it budgets the associated F&A cost reimbursement to pay for maintaining the buildings in which the research occurs and supporting the infrastructure and business functions necessary to conduct the

<sup>&</sup>lt;sup>2</sup> ONR Negotiation Agreement (June 20, 2024), https://ras.mit.edu/document/mit-fy25-provisional-farates-letter.

research. Examples of the costs supported by F&A reimbursement include the costs of building, maintaining, operating and renewing research buildings, laboratories and equipment; hazardous materials management; data storage; radiation safety; insurance; administrative systems and services; and compliance with federal, state, and local regulations.

- 12. Each principal investigator ("PI") at MIT conducting research uses the agreed-upon project budget, as awarded by NIH and other federal granting agencies, to develop a financial plan for performing each supported research project, many of which span multiple years. This budget typically includes supporting graduate student researchers, postdoctoral researchers, other research staff, equipment, and other research costs. It is on the basis of these project-level budgets in hundreds of individual labs across MIT's campus that individual PIs make commitments to hire graduate students, researchers and staff. Those people then derive their education and their livelihoods from this funding.
- 13. The costs being reimbursed partially through the F&A rate are real costs. The final rate is not speculative, but rather established each year after audit by the federal government of actual costs incurred. These costs still exist and must be covered, even if the F&A reimbursement rate is unilaterally reduced. Approximately two-thirds of F&A costs at MIT are facilities-related, and MIT cannot realistically take immediate action to eliminate utilities, maintenance and other activities required to operate buildings and laboratories that conduct federally funded research.
- 14. As a direct result of real and threatened federal cost-cutting in fundamental research and potential increased levies on universities, including this attempted reduction in F&A cost reimbursement rate, MIT is being forced to take immediate and contemporaneous action to reduce its financial exposure. The Institute is implementing operating budget reductions and curtailing its capital investments. At the Institute level, MIT is deferring capital projects, notably including research infrastructure and space renewals, lab equipment installations, ventilation air capacity improvements, and energy efficiency upgrades. MIT also expects to implement a partial hiring freeze across the

Institute this week. In addition, this week MIT is issuing central budgets to its internal units that mandate cuts from current resource levels. Among the possible ways these budget cuts will be implemented by internal units include: admitting fewer graduate students—an engine of MIT's research activity and the future of U.S. science; undertaking separate reductions in employee positions; limiting or deferring investment in advanced research facilities; and scaling back other forms of investment. These actions collectively will decrease the amount of scientific research MIT can conduct, affect individuals and families, and could ultimately require MIT to either increase tuition and/or decrease financial aid for students.

- 15. The threatened rate reduction will also have a direct impact on the NIH-funded research being conducted at the Institute. For example, the Koch Institute has been funded by a Cancer Center Support Grant from the National Cancer Institute for many years, and this support has enabled multiple improvements in cancer care, helping to revolutionize how cancer patients are cared for across the country. Over 60 PIs are dedicated to this effort, and the funds from F&A cost reimbursements provide them with access to essential support staff, as well as state-of-the-art equipment and infrastructure, to make that research possible. Just to name a few ongoing projects that rely on such funding:
  - a. Researchers are working to improve the analysis of CT scans to find lung cancers in patients earlier than they would be found otherwise, which will both save lives and reduce the costs of treatment for millions of Americans. This research depends on the Koch Institute's efforts to modernize its computational support infrastructure, including resources that enable artificial intelligence and machine learning approaches to improving cancer care. This effort would be severely disrupted, and innovation slowed, by major cuts to research funding.
  - b. Acute leukemia is the most common cancer in children, but it also occurs in adults. While many children are cured, not all are, and fewer than 50% of adults

survive this disease. Almost all patients respond to initial treatment, but so-called "residual disease" can lead to recurrence and death in many patients. Research supported by MIT's Koch Institute infrastructure has developed a unique device to use the physical properties of cancer cells found in residual disease to predict how that residual cancer will respond to different drugs, with the aim of eliminating residual disease and dramatically improving chances of recovery. The potential success of this approach will either be delayed, or not realized at all, if funding is substantially reduced.

- c. New specialized light-based imaging approaches are being developed to find pre-ovarian cancer lesions in the fallopian tubes. Ovarian cancer is diagnosed in approximately 20,000 women every year, and most have advanced and incurable disease that will result in death. This new technology helps to identify ovarian cancer lesions earlier, which could lead to better detection of the disease and higher chances of survival. This research relies on Koch Institute infrastructure, and it would be slowed or stopped if federal funding is cut.
- 16. For an example outside the Koch Institute, MIT's Picower Institute for Learning and Memory is leading an active \$2.8 million grant to investigate the use of non-invasive sensory stimulation to manipulate neural oscillations. If successful, this work will improve the accessibility, safety, and efficacy of therapeutic intervention for Alzheimer's disease. Alzheimer's disease is a pervasive neurodegenerative disorder that causes memory loss and dementia. Approximately 7 million Americans are living with Alzheimer's disease. There are several approved treatments for the disease but none of them can meaningfully halt or reverse the disease progression. MIT researchers have developed a non-invasive and highly accessible approach to combat Alzheimer's disease using patterned light and sound stimulation. With private support, the team has already completed pilot

Phase 1 and Phase 2A clinical studies, and the researchers aim to accelerate translation of the findings to benefit patients. The NIH support for this grant is crucial to understanding how this approach impacts interactions between neurons and microglia – that is, how and why it works – to support its continued therapeutic development. A reduction in NIH funding would delay this innovative and important work, and put its success in jeopardy.

- 17. Over time, the NIH cuts will also degrade MIT's advanced research capacity as a whole, because they will limit the Institute's ability to invest in its core research enterprise at a time in global competition when the United States wants its scientific and technology research at its strongest.
- 18. Research universities like MIT are critical components of innovation economies in their local geographies. MIT is at the center of Kendall Square in Cambridge, Massachusetts. Kendall Square houses an array of life sciences and technology firms, start-ups, industry, and venture capital firms. MIT and Kendall Square are also closely linked to area universities and hospitals, part of a thriving regional ecosystem of discovery, invention, and economic impact which materially contributes to the improvement of human health and scientific discoveries.
- 19. MIT employs nearly 14,000 Massachusetts residents, including more than 2,300 Cambridge residents. Spending from students, staff, and faculty support the local economy. Tourism dollars tied to MIT flow to the Cambridge and Massachusetts economies. MIT is also the longtime top taxpayer in the City of Cambridge because the Institute has historically chosen to invest in its home municipality. 2024 tax payments related to MIT real estate holdings totaled \$96.7 million, which represents 16.8% of the Cambridge tax levy.
- 20. Relatedly, MIT's federally funded research also includes important partnerships with the Commonwealth of Massachusetts. For example, MIT presently has four subawards of NIH

funding active with the University of Massachusetts Medical Center, including for research into the human genome, systems genetics of tuberculosis, and malaria prevention.

- 21. A loss of federal funding would significantly constrain MIT's ability to invest in the people and facilities that make up its research enterprise. Over time, this would lead to less investment in Massachusetts; have negative cascading impacts for MIT's research partners in academia, medicine, and industry; and undermine economic growth across both Massachusetts and the country.
- 22. Research universities like MIT contribute significantly to innovation and the strength of the U.S. economy, and federal research funding is the key to these benefits. The return on investment is significant. Analysis by the organization United for Medical Research<sup>3</sup> suggests that each \$1.00 of NIH-funded research in fiscal year 2023 generated \$2.46 in new economic activity.
- 23. Scaling back the research capacity of U.S. universities, including MIT, would slow scientific progress and have detrimental economic consequences. Not only would the global community lose ground toward cures, new technologies, and other innovation, but less research in the United States would also threaten to impede progress on American medical, scientific, technical, and economic priorities; result in fewer jobs and slower economic growth; cede to other nations American companies' competitive advantage as a catalyst of new industries; and weaken long-term U.S. competitiveness against global adversaries, particularly as countries like China continue to boost their research funding and research infrastructure.
- 24. MIT cannot simply make up an increased gap in annual federal research funding by withdrawing monies from its institutional endowment. As noted above, MIT already matches

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<sup>&</sup>lt;sup>3</sup> "NIH's Role in Sustaining the U.S. Economy," UMR (2024), https://www.unitedformedicalresearch.org/wp-content/uploads/2024/03/UMR-NIHs-Role-in-Sustaining-the-US-Economy-2024-Update.pdf.

sponsored research funding nearly dollar-for-dollar with research spending from its endowment, other

charitable funds, and discretionary resources.

25. MIT's endowment is principally made up of individual donations made for specific

purposes and invested for lasting impact. MIT is legally required to use endowment returns consistent

with the donors' wishes and the purposes for which each endowment fund was established. Currently,

approximately 80% of MIT's endowment is subject to such restrictions. MIT cannot reallocate these

funds to cover a loss of federal reimbursements for research costs. Moreover, MIT's endowment is a

resource intended to provide support for the Institute's costs in perpetuity. The Institute cannot

responsibly liquidate the endowment without jeopardizing that function, draining the Institute of

resources needed to sustain cutting-edge research capacity for future generations.

26. In addition, MIT's endowment supports approximately 50% of the total cost of

undergraduate tuition: MIT's financial aid to undergraduates totaled \$159 million last year, including

\$136 million to cover tuition and \$23 million toward students' living expenses. As a result of MIT's

financial aid policies, last year, almost 40% of undergraduates attended MIT tuition-free and 87% of

undergraduates graduated debt-free. Similarly, MIT funds 62% of the tuition for the roughly 7,000

graduate students at the Institute through fellowships, subsidies, and other resources. NIH's attempted

reduction in F&A rate will make such financial aid levels more difficult to maintain in the long-term

and lead to increased financial burden for students and families.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on this day, February 10, 2025, at Cambridge, Massachusetts.

/s/ Ian A. Waitz

Ian A. Waitz

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